

## **Minutes of the InterCAT Technical Working Group Meeting, Nov-17, 2005**

Eric Dufresne

### **Facility Update/News, John Quintana, AOD**

John reminded resident users about the 8-10 hours high current study planned in the next scheduling period 2006-2. He also introduced his new “private” web site for facts on beamline construction and operations located at <http://www.extremebeamlines.org>. John utilized web services outside the ANL domain to keep a list of useful internet resources for interested beamline staff. On this website, links are provided to vendors that John and others have used for services or equipment. Also provided is information on past experience with these vendors that was obtained from his work at various synchrotron facilities and beamlines.

### **Presentations and Discussions**

#### **Machine operation parameters – and experiment/ user’s tolerances, Eric Dufresne, Reinhard Pahl, John Quintana.**

Two responses were received from the TWG community on this ‘request for comments’ by John Quintana. These preliminary comments are on the TWG web site. See the question and response here [http://www.aps.anl.gov/About/Committees/InterCAT\\_Technical\\_Workgroup/](http://www.aps.anl.gov/About/Committees/InterCAT_Technical_Workgroup/). At the discussion no consensus was reached (yet) on how to define a set of operation parameters that would justify dumping the beam. John asked the community to reflect on this question further.

#### **Brief introduction to the GE Angio amorphous silicon detector, John Lee, AOD**

John introduced the large area detector from General Electric and first experiences with this device that the detector group obtained in the past months. The GE Angio detector is a medical X-ray imaging detector designed for high-energy X-rays (80 keV). It consists of an array of 2k by 2k pixels, each 200  $\mu\text{m}$  x 200  $\mu\text{m}$ , for a total area of 410 mm by 410 mm. The X-ray scintillator used is a 500  $\mu\text{m}$  CsI layer deposited on top of an amorphous Si TFT array. The fast addressable TFT pixels enable readouts of a 2k by 2k 14 bit image in 126 ms. The detector can also read 1k by 1k images in 23 ms. The system has a user selectable gain. Due to the low dead time for this system, its performance compares very favorably with image plate systems such as the MAR 345 (readout of 70s). It outperforms point detection in powder diffraction of Ni standards. If you have any questions regarding specifications etc. please contact John at [jlee@aps.anl.gov](mailto:jlee@aps.anl.gov).

#### **What’s new with APS insertion devices? Elizabeth Moog, XFD**

A very interesting update on the latest insertion device developments and related issues. Please see the TWG web site for the full presentation.

#### **Tools & Toys, Julie Cross, XOR**

Julie reported on her experiences with airbearings from NEWALL and the LINKam microscope freezer for radiation sensitive samples. Please see the TWG web site for a copy of the presentation.

The next TWG meeting will be on Dec-15, 2005, at 10am in room A1100 (Bldg.401).